

Metropolitan Water Reclamation District of Greater Chicago

MONITORING AND RESEARCH DEPARTMENT

REPORT NO. 11-71

MONTHLY CONTROLLED SOLIDS

DISTRIBUTION REPORT

SEPTEMBER 2011

DECEMBER 2011

Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street

Chicago, Illinois 60611-3154

312.751.5190

Kathleen Therese Meany Vice President
Gloria Alitto Majewski Chairman of Finance
Frank Avila
Patricia Horton
Barbara J. McGowan
Cynthia M. Santos
Debra Shore
Mariyana T. Spyropoulos

Board of Commissioners

Terrence J. O'Brien President

Thomas C. Granato, Ph.D.

Director of Monitoring and Research Department thomas.granato@mwrd.org

December 15, 2011

Mr. S. Alan Keller, P.E. Manager, Permit Section Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

Dear Mr. Keller:

Subject: Metropolitan Water Reclamation District of Greater Chicago – Controlled Solids Distribution Program Illinois Environmental Protection Agency Permit No. 2010-SC-0200, September 2011

This letter transmits information and data for the Metropolitan Water Reclamation District of Greater Chicago - Controlled Solids Distribution Program for September 2011, as required by Illinois Environmental Protection Agency Permit No. 2010-SC-0200.

Sludge flow schematic diagrams for solids processed during September 2011 are shown in $\underline{\text{Figure 1}}$ - John E. Egan Water Reclamation Plant (WRP), $\underline{\text{Figure 2}}$ - Calumet WRP, and $\underline{\text{Figure 3}}$ - Stickney WRP.

Biosolids were distributed to 18 sites in September. The user information report for those sites is presented in <u>Table 1</u>, and the analysis of the composited biosolids delivered to those sites is presented in <u>Table 2</u>.

Very truly yours,

Thomas C. Granato, Ph.D. Director Monitoring and Research

TCG:AC:cm Attachments

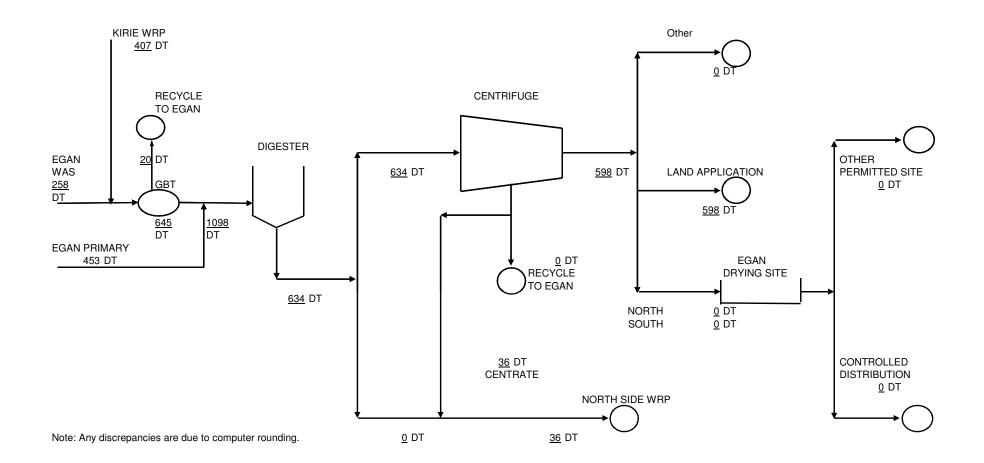
cc: V. Aistars (USEPA)

R. Sulski (IEPA)

K. Kits O'Connor

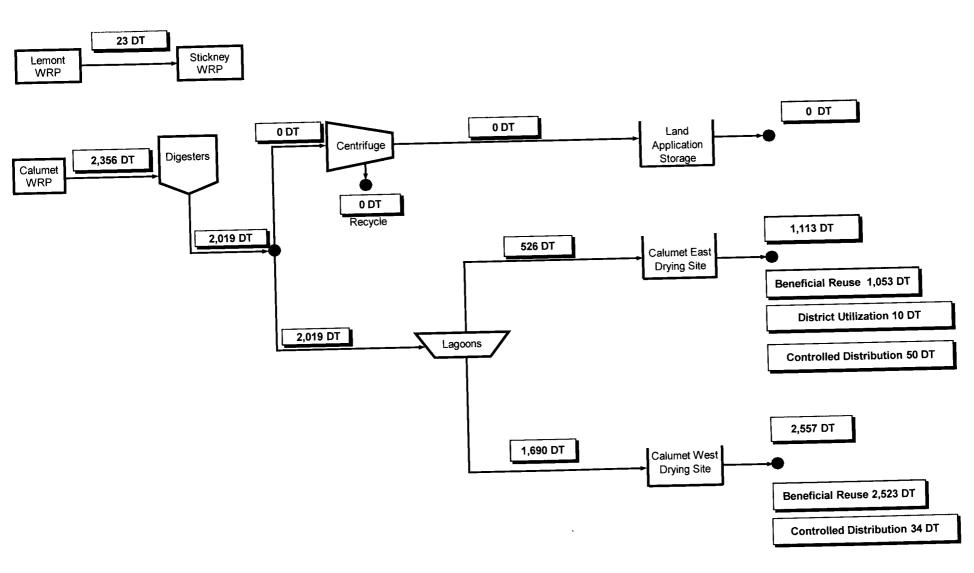
J.E. EGAN WRP SOLIDS DISTRIBUTION-FIGURE 1

September-11



CALUMET WRP SOLIDS DISTRIBUTION - September 2011

Figure 2



STICKNEY WATER RECLAMATION PLANT SOLIDS DISTRIBUTION FOR SEPTEMBER 2011 FIGURE 3

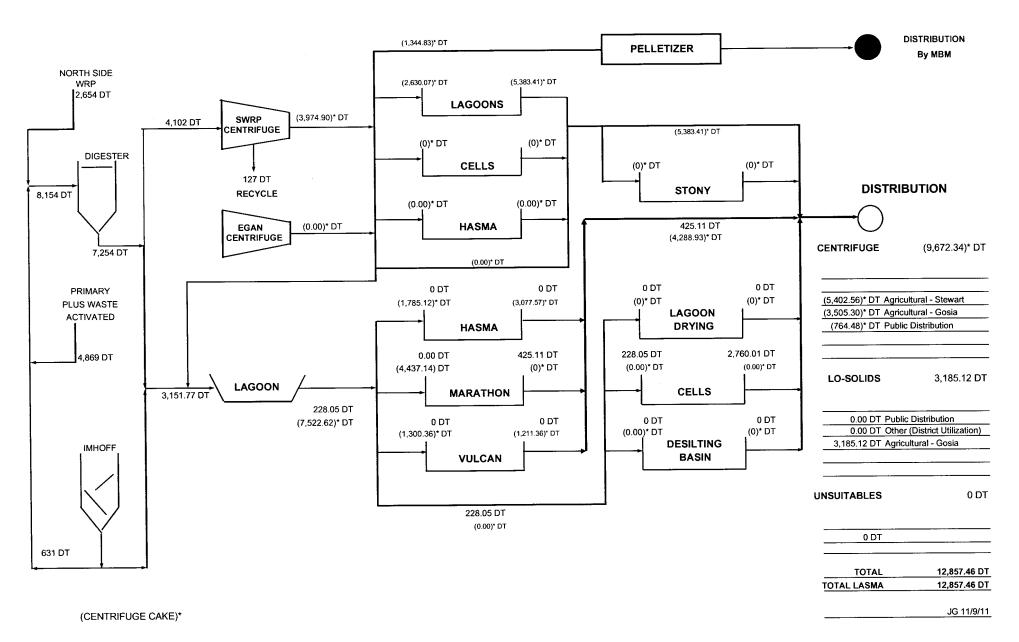


TABLE 1: CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT FOR AGITATION DRIED ANAEROBICALLY DIGESTED SOLIDS

				Quantity	(dry tons)		Appl	ication
Location No.	Name and Address of User	Source	Dates	2011 September	2011 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)
1	Summit Park District Skate Park 5700 S. Archer Ave. Summit, IL 60501	Stickney WRP	2	50.0	50.0	Topdressing as fertilizer for turf growth	2	25.0
2	Chicago Park District Horner Park 541 N. Fairbanks Chicago, IL 60611	Stickney WRP	6	15.5	15.5	Topdressing as fertilizer for turf growth	1	15.5
3	Lisle Park District Woodglenn Park 1825 Short St. Lisle, IL 60532	Stickney WRP	6	62.5	62.5	Topdressing as fertilizer for turf growth	3	20.8
4	Tinley Park Park District Freedom Park 7835 Timber Dr. Tinley Park, IL 60477	Stickney WRP	6, 21, 23	325.2	325.2	Topdressing as fertilizer for turf growth	12	27.1
5	Burbank Park District Fitzgerald Park 83 rd and Nashville Burbank, IL 60459	Stickney WRP	7	17.5	17.5	Topdressing as fertilizer for turf growth	1	17.5

TABLE 1 (Continued): CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT FOR AGITATION DRIED ANAEROBICALLY DIGESTED SOLIDS

				Quantity	(dry tons)		Application	
Location No.	Name and Address of User	Source	Dates	2011 September	2011 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)
6	Joliet Township High School 201 E. Johnson St. Joliet, IL 60432	Stickney WRP	7	50.1	50.1	Topdressing as fertilizer for turf growth	2	25.0
7	Burbank Park District McArthur Park 83 rd and McVicker Burbank, IL 60459	Stickney WRP	7	17.8	17.8	Topdressing as fertilizer for turf growth	1	17.8
8	Burbank Park District Newcastle Park 8050 S. Newcastle Burbank, IL 60459	Stickney WRP	7	17.1	17.1	Topdressing as fertilizer for turf growth	1	17.1
9	Burbank Park District Nottingham Park 75 th and Nottingham Burbank, IL 60459	Stickney WRP	7	32.5	32.5	Topdressing as fertilizer for turf growth	2	16.2

TABLE 1 (Continued): CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT FOR AGITATION DRIED ANAEROBICALLY DIGESTED SOLIDS

				Quantity	(dry tons)		Application		
Location No.	Name and Address of User	Source	Dates	2011 September	2011 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)	
10	Burbank Park District Wright Park 8050 S. Newcastle Burbank, IL 60459	Stickney WRP	7	81.4	81.4	Topdressing as fertilizer for turf growth	3	27.1	
11	York Center Park District Villa Roosevelt Park 1609 S. Luther Ave. Lombard, IL 60148	Stickney WRP	7, 8	30.6	30.6	Topdressing as fertilizer for turf growth	2	15.3	
12	Oak Lawn Park District Centennial Park 4425 Southwest Hwy. Oak Lawn, IL 60453	Stickney WRP	12	14.4	14.4	Topdressing as fertilizer for turf growth	1	14.3	
13	Twin Orchard Country Club 22353 Old McHenry Rd. Long Grove, IL 60047	Stickney WRP	14	15.5	15.5	Topdressing as fertilizer for turf growth	1	15.5	
14	Highland Park Golf Club, 1201 Park Avenue West Highland Park, IL 60035	Stickney WRP	21	16.3	16.3	Topdressing as fertilizer for turf growth	1	16.3	

TABLE 1 (Continued): CONTROLLED SOLIDS DISTRIBUTION PROGRAM USER INFORMATION REPORT FOR AGITATION DRIED ANAEROBICALLY DIGESTED SOLIDS

				Quantity	(dry tons)		Application		
Location No.	Name and Address of User	Source	Dates	2011 September	2011 Cumulative	Biosolids Use	Area (acres)	Rate (tons/acre)	
15	River Forest Park District Priory Park 401 Thatcher Ave. River Forest, IL 60305	Stickney WRP	22	18.1	18.1	Topdressing as fertilizer for turf growth	1	18.1	
16	Joliet Country Club 1009 Spencer Rd. Joliet, IL 60433	Calumet WRP	8, 13, 14	74.9	74.9	Topdressing as fertilizer for turf growth	3	25.0	
17	Calumet WRP Metropolitan Water Reclamation District of Greater Chicago Chicago, IL 60628	Calumet WRP	13	9.9	459.5	Topdressing as fertilizer for turf growth	1	9.9	
18	Balmoral Woods Golf Club 26732 S. Balmoral Woods Dr. Crete, IL 60416	Calumet WRP	21	9.2	9.2	Topdressing as fertilizer for turf growth	1	9.2	

TABLE 2: ANALYSIS OF DIGESTED BIOSOLIDS APPLIED TO LAND FROM THE STICKNEY AND CALUMET WATER RECLAMATION PLANTS DRYING AREA DURING SEPTEMBER 2011

				Stickney WRP			Calumet WRP
User Location No.1		1	2, ,3, 4	5, 6, 7, 8, 9, 10, 11	12, 13	4, 14, 15	16, 17, 18
Constituent	<u>Unit</u>						
рН		6.4	6.3	6.6	6.4	6.6	6.7
Total Solids	%	75.4	66.9	74.9	74.5	74.1	67.3
Total Volatile Solids	"	36.9	44.8	45.5	43.1	41.9	40.0
Total Kjeldahl-N	mg/kg	25,438	27,489	23,696	24,071	23,310	22,154
NH ₃ -N	"	2,144	3,385	3,891	3,269	1,818	1,854
Total P	"	25,098	26,674	22,379	25,104	25,784	21,727
As	"	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Cd	"	3.8	3.3	3.2	3.5	3.7	2.1
Cr	"	157	156	151	161	156	63
Cu	"	444	416	414	432	463	387
Hg	"	0.7	0.6	1.0	0.7	0.7	1.2
K	"	2,485	4,163	3,785	3,946	2,421	3,075
Mn	"	628	610	603	619	618	902

TABLE 2 (Continued): ANALYSIS OF DIGESTED BIOSOLIDS APPLIED TO LAND FROM THE STICKNEY AND CALUMET WATER RECLAMATION PLANTS DRYING AREA DURING SEPTEMBER 2011

			Calumet WRP					
User Location No.1		1	2, ,3, 4	5, 6, 7, 8, 9, 10, 11	12, 13	4, 14, 15	16, 17, 18	
Mo	"	10.3	9.9	9.5	10.1	10.5	9.5	
Ni	"	42.3	40.1	39.5	40.0	41.5	30.7	
Pb	"	121	114	110	113	113	85	
Se	"	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.00	
Zn	"	896	863	828	843	890	989	

¹Locations listed in <u>Table 1</u>.